

<b>PRE-APPEAL BRIEF REQUEST FOR REVIEW</b>		Docket Number Q80473
Mail Stop AF Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450	Application Number 10/807,348	Filed March 24, 2004
	First Named Inventor Kosuke TAKASAKI	
	Art Unit 2812	Examiner Stanetta D. ISSAC
	WASHINGTON OFFICE <b>23373</b> CUSTOMER NUMBER	
Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.		
This request is being filed with a notice of appeal		
The review is requested for the reasons(s) stated on the attached sheet(s).		
Note: No more than five (5) pages may be provided.		
<input checked="" type="checkbox"/> I am an attorney or agent of record. Registration number    50,245		 Signature
<hr/> Brian K. Shelton Typed or printed name		
<hr/> (202) 293-7060 Telephone number		
<hr/> July 31, 2006 Date		

**PATENT APPLICATION**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of

Docket No: Q80473

Kosuke TAKASAKI, et al.

Appln. No.: 10/807,348

Group Art Unit: 2812

Confirmation No.: 5375

Examiner: Stanetta D. ISSAC

Filed: March 24, 2004

For: SOLID-STATE IMAGING DEVICE AND METHOD FOR MANUFACTURING THE SAME

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

**MAIL STOP AF - PATENTS**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

Pursuant to the Pre-Appeal Brief Conference Program, and further to the Examiner's Final Office Action dated April 6, 2006, Applicant files this Pre-Appeal Brief Request for Review. This Request is also accompanied by the filing of a Notice of Appeal.

Applicant turns now to the rejections at issue:

In the Final Office Action, claims 1-16 and 23 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Hashimoto (U.S. Patent No. 7,001,797) in view of Spooner (U.S. Patent Publication No. 2002/0096743). Applicant submits that the rejection of these claims is improper and reversal is requested at least for the following reasons.

Initially, Applicant submits that neither Hashimoto nor Spooner, whether taken alone or in combination, teach or suggest all the features of claims 1-16 and 23. With respect to claim 1, the Examiner alleges that Hashimoto teaches applying an adhesive to a plurality of spacers

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(referencing spacer 44) formed on a transparent substrate (referencing plate 42), and applying pressure to the transparent substrate, which is adhered to the plurality of spacers formed on the transparent substrate. *See* Office Action at page 2. Further, the Examiner concedes that Hashimoto fails to suggest the features of “adhering a transfer member to which the adhesive is applied and releasing the transfer member from the transparent substrate to transfer the adhesive, which is applied to the transfer member, from the transfer member onto the plurality of spacers formed on the transparent substrate.” *See* Office Action at page 3.

However, the Examiner contends that these features are taught by Spooner and alleges that it would have been obvious to combine the teachings of Hashimoto and Spooner because “a transfer member, as taught by Spooner, can be included in the formation of the adhesive layer on the spacers.” *See* Office Action at page 5. As discussed in the previous Response, Applicant respectfully disagrees and submits the Examiner has failed to establish *prima facie* obviousness with respect to all limitations recited by claim 1.

The teachings of Hashimoto and Spooner have been discussed at length in the Response of June 27, 2006 at pages 2-6. For instance, Applicant demonstrated that neither Hashimoto nor Spooner, whether taken alone or in combination, would teach or suggest *at least* the features of adhering a transfer member to the plurality of spacers and the recited operation of releasing the transfer member from the transparent substrate to transfer the adhesive from the transfer member onto the plurality of spacers formed on the transparent substrate. In this regard, Applicant notes that, as conceded by the Examiner, Hashimoto fails to teach a transfer member. Rather, as

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previously discussed, Hashimoto teaches that that an adhesive may be applied to “at least one of the cover 30 (spacer 34) and the substrate 10” in order to seal the optical section 14 prior to separation of the substrate. Thus, Hashimoto does not suggest transferring the adhesive from the transfer member to the spacer.

Further, Spooner likewise fails to suggest a transfer member. Indeed, Spooner simply teaches that an adhesive medium may be provided to adhere the cap 110 to the spacer 101, and an adhesive layer 103 may be provided to adhere the spacer 101 to the substrate so as to cap the MEMS structures during dicing. After the dicing operation, Spooner teaches that the cap and spacers are removed.

Thus, in both Hashimoto and Spooner, adhesive material is simply provided on a covering member. However, neither Hashimoto nor Spooner teaches a transfer member or the operation of “releasing the transfer member from the transparent substrate to transfer the adhesive”, as recited by claim 1. By virtue of the claimed method, the adhesive transferred on the spacer can be uniform in thickness, and the adhesive does not drip off of the spacer.

Moreover, in the Final Office Action, nowhere does the Examiner identify any transfer member that is allegedly taught by Spooner. Rather, the Examiner simply recites claim limitations and points to paragraphs 107-108 and 112-115. However, the portions of Spooner relied upon by the Examiner do not teach transfer of adhesive by *releasing a transfer member*, as claimed, but merely teach that adhesives can be applied to the respective elements.

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Further, in the Advisory Action, the Examiner apparently refers to paragraph 108 of Spooner, which teaches that adhesive layer 103 “may be either an adhesive medium or a tape with adhesive on both sides.” However, as pointed out in the prior Response, Spooner merely teaches that an adhesive medium may be provided to adhere cap 110 to spacer 101, and an adhesive layer 103 may be provided to adhere spacer 101 to the substrate so as to cap the MEMS structures during dicing. *See* Response of June 27, 2006 at page 5.

In the Advisory Action, the Examiner also contends that Spooner discloses applying the adhesives by using a tape or a flexible film. Applicant respectfully disagrees with the Examiner’s characterization of the teaching of Spooner. As best understood, the Examiner is referring to tape 25 shown in Figures 11 to 17. However, tape 25 is not for transferring the adhesive to the spacers. Moreover, cover 27 of Spooner is for temporarily protecting the diced MEMS wafer 1 and is removed in a step of packaging the IC device. For this purpose, the peelable tape 25 of Spooner is adhered to the cover. The tape 25 works as a spacer and remains adhered to the cover 27. Accordingly, tape 25 is not equivalent to the transfer member recited by claim 1, nor does Spooner suggest the operation of *releasing* the transfer member from the transparent substrate to *transfer* the adhesive, as claimed.

Applicant submits that the Examiner is not giving proper weight to the claim limitations, as recited. Indeed, claim 1 recites the operation of releasing the transfer member from the transparent substrate, which thereby transfers the adhesive. By contrast, the Examiner has simply identified an adhesive layer, which is alleged to “bond[] the spacers to the transparent

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substrate.” *See* Advisory Action at page 3. Moreover, the Examiner does not even refer to the claimed **releasing** operation in his remarks.

Accordingly, Applicant submits that the combination of Spooner and Hashimoto fails to teach or suggest all the limitations of claim 1. Therefore, even assuming *arguendo* that one of ordinary skill would have been motivated to combine the teachings of Spooner and Hashimoto, the Examiner has failed to establish *prima facie* obviousness at least because the combination fails to teach or suggest all the claimed features. Reconsideration and withdrawal of the rejection of claim 1 is requested.

With respect to dependent claims 2-16 and 23, Applicant submits that these claims are allowable at least by virtue of their dependency and by virtue of the features recited therein. Further, Applicant again submits that the rejections of dependent claims 6 and 23 are improper for the reasons set forth in the Response of June 27, 2006 at pages 6-7. In the Advisory Action, the Examiner does not respond to these arguments.

As evidenced by the foregoing, the rejection of claims 1-16 and 23 is improper and reversal is respectfully requested.

Respectfully submitted,



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